LINDA LINGLE GOVERNOR OF HAWAII



## STATE OF HAWAII DEPARTMENT OF HEALTH

P.O. BOX 3378 HONOLULU, HAWAII 96801-3378 In reply, please refer to: EMD / CWB

11001JLS.06c

DATE: November 16, 2006 NPDES PERMIT NO.: HI 0110078

**FACT SHEET:** REAPPLICATION FOR A NATIONAL POLLUTANT

DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO

DISCHARGE TO WATERS OF THE UNITED STATES

**PERMITTEE: UNITED STATES MARINE CORPS (USMC)** 

MARINE CORPS BASE HAWAII (MCBH)

**FACILITY:** MARINE CORPS BASE HAWAII

KANEOHE BAY WATER RECLAMATION FACILITY (WRF)

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### **PERMIT STATUS**

NPDES Permit No. HI 0110078 was issued on January 24, 2002, effective on February 24, 2002, and expired at midnight on July 31, 2006. The Permittee reapplied for an NPDES permit on January 31, 2006. The Department of Health (DOH) administratively extended the existing NPDES permit on July 25, 2006. The Permittee will be required to act consistently with the existing permit during the pendency of its renewal application.

The Director of Health (Director) has reviewed this permit application and applicable laws and regulations and proposes to issue an NPDES permit to the applicant valid until midnight on July 31, 2011. This proposed permit contains those terms and conditions which the Director has

determined are necessary to carry out the provisions of the Federal Clean Water Act, as amended, (33 U.S.C.1251 et seq.; the "Act"); and Hawaii Revised Statutes, Chapter 342D.

### FACILITY OPERATION AND LOCATION

The MCBH Kaneohe Bay WRF is located on the southern portion of the Mokapu Peninsula in Windward Oahu, approximately one (1) mile north of the City and County of Honolulu's (City) Kailua Regional Wastewater Treatment Plant (Kailua Regional WWTP). The MCBH Kaneohe Bay WRF serves a population of 22,000 and has an average daily influent flow design capacity of two (2) million gallons per day (from Pollution Prevention Report for Calendar Year 2005, dated February 15, 2006). The influent is primarily domestic (bachelor quarters and family housing, including mess halls, Officer and Enlisted Clubs, administrative and office areas) with minor industrial discharges from eating establishments through grease traps; boilers, washracks (vehicle/aircraft), vehicle maintenance, aircraft maintenance, engine test facility, auto repair, and ground support equipment through oil-water separators; and photo shops/X-ray equipment through silver recovery units.

The WRF provides secondary treatment with a screening, primary clarification, trickling filtration, secondary clarification, and effluent polishing. Chlorine tablets are used for disinfection of the effluent for the irrigation water used by the Klipper Golf Course (Part VII.E. of EPA Form 2F). The sludge treatment includes anaerobic digestion, sludge drying beds, and disposal to a landfill.

Approximately 18% of the effluent is used for irrigation of the MCBH Kaneohe Bay WRF's Klipper Golf Course and in-plant usage. The remainder is pumped via force main from the MCBH Kaneohe Bay WRF through Outfall Serial No. 001 to the City's Kailua Regional WWTP's Mokapu Effluent Pumping Station and then to the Mokapu Outfall at coordinates: Latitude 21°27'32"N and Longitude 157°42'56"W. The 48-inch diameter outfall extends 5,056 feet off of Mokapu Peninsula to a depth of 105 feet (from Kailua Regional WWTP ZOM application).

The storm water runoff will discharge through Outfall Serial No. 002 at the facility's coordinates Latitude 21°26'30"N and Longitude 157°45'45"W. Please see the "Description of the Present Discharge" for the storm water runoff information.

## RECEIVING WATER CLASSIFICATION

The Pacific Ocean off of Mokapu Peninsula is classified as "Class A, Open Coastal Waters, dry" under Hawaii Administrative Rules (HAR), Chapter 11-54, Section 11-54-6(b)(3). The uses to be protected are all uses compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters. This class of water shall not act as receiving waters for any discharges which have not received the best degree of treatment or control compatible with the criteria established for this class (HAR, Chapter 11-54, Section 11-54-3(c)(2)).

The Kaneohe Bay is classified as "Class AA, Marine Waters, Embayment" under HAR, Chapter 11-54, Section 11-54-6(a)(2). The is that these waters remain in their natural pristine state as nearly as possible with an absolute minimum of pollution or alteration of water quality from any human-caused source or actions. To the extent practicable, the wilderness character of these areas shall be protected (HAR, Chapter 11-54, Section 11-54-3(c)(1)).

## **OCEAN DISCHARGE CRITERIA**

The Director has considered the Ocean Discharge Criteria established pursuant to Section 403(c) of the Act for the discharge of pollutants into the territorial sea, the waters of the contiguous zone, or the oceans. The EPA has promulgated regulations for Ocean Discharge Criteria in 40 CFR Part 125, Subpart M. Therefore, the Director has determined that the discharge will not cause unreasonable degradation to the marine environment. Based on current information, the Director proposes to issue a permit.

## **ZONE OF MIXING (ZOM) DESIGNATION**

The ZOM is for the assimilation of treated wastewater from the MCBH Kaneohe Bay WRF. The MCBH Kaneohe Bay WRF is discharging through the City's Mokapu Outfall. The ZOM granted for the Kailua Regional WWTP (NPDES Permit No. HI 0021296 and ZM-097) will be used by the MCBH Kaneohe Bay WRF. This City Permit and ZOM will expire on June 30, 2009.

### DESCRIPTION OF THE PRESENT DISCHARGE

- 1. Outfall Serial No. 001 (Secondary Treated Wastewater)
  - a. The following is a quantitative description of the effluent characteristics (as believed present) discharging through Outfall Serial No. 001 as submitted in Section V., Parts A., B., and C. of EPA Form 3510-2C of the application dated January 20, 2006, and additional information, dated February 21, 2006. Data shown in bold, italics are from the application and are the same on the DMRs. Data shown in italics are only from the DMRs.

Parameter (units)	Maximum Daily Value	Maximum 30-Day Value		
Part A				
Biochemical Oxygen Demand 5-Day (BOD) (mg/l)	30	21.0		
Chemical Oxygen Demand (COD) (mg/l)	270	{1}		
Total Organic Carbon (TOC) (mg/l)	16.2	{1}		
Total Suspended Solids (mg/l)	49	18.3		

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Parameter (units)	Maximum Daily Value	Maximum 30-Day Value
Ammonia as N (mg/l)	8.2	{1}
Flow (MGD)	3.730	1.52
Temperature (winter) (°C)	25.7	25.3
Temperature (summer) (°C)	28.0	25.9
pH (Standard Limits)	6.36 - 7.85	{3}
Part B		
Bromide (mg/l)	1.4	{1}
Total Residual Chlorine (mg/l)	{2}	{2}
Fecal Coliform (#/100 ml) [Enterococcus bacteria]	430,000	{1}
Flouride (mg/l)	0.94	{1}
Nitrate-Nitrite (as N) (mg/l)	4.2	{1}
Total Organic Nitrogen (as N) (mg/l)	43	{1}
Oil and Grease (mg/l)	8.3	{1}
Total Phosphorus (as P) (mg/l)	3.91	{1}
Alpha, Total (pCi/L)	ND <4.37	{1}
Beta, Total (pCi/L)	12.2	{1}
Radium, Total (pCi/L)	ND <0.783	{1}
Radium 226, Total	{5}	{1}
Sulfate (as SO <sub>4</sub> ) (mg/l)	78.4	{1}
Sulfide (as S) (mg/l)	<1	{1}
Sulfite (as SO <sub>3</sub> ) (mg/l)	<2	{1}
Surfactants (mg/l)	0.2	{1}
Total Aluminum (µg/l)	{5}	{1}
Total Barium (µg/l)	4.0	{1}
Total Boron (μg/l)	396	{1}
Total Cobalt (μg/l)	<10	{1}
Total Iron (μg/l)	<50	{1}
Total Magnesium (μg/l)	33,200	{1}
Total Manganese (µg/l)	14	{1}

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Parameter (units)	Maximum Daily Value	Maximum 30-Day Value
Total Tin (μg/l)	<50	{1}
Total Titanium (ug/l)	<100	{1}
Part C		
Total Zinc (µg/l) [Metals, Cyanide, and Total Phenols]	18.8	{1}
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (µg/l) [Dioxin]	{6}	{1}
Benzidine (µg/l) [GC/MS Fraction - Base/Neutral Compounds]	<10	{1}
Bis (2-Ethylhexyl) Phthalate (μg/l)	<15	{1}
2,6-Dinitrotoluene (μg/l)	<2	{1}
N-Nitrosodi-N-Propylamine (µg/l)	<2	{1}

#### Notes:

- {1} No maximum 30-day value because less than 30 analyses (most 1 analysis, some 12 analyses).
- {2} Discharged effluent is not chlorinated. No analyses.
- {3} No maximum 30-day value provided for 52 analyses.
- No response provided in application because believed absent.
- {5} Not detected at a reporting limit of 0.01  $\mu$ g/l.

Parameters listed in the following portions of Section C were all believed absent with results not detected (i.e., below the practical quantitation limit listed). Those parameters from Section C which are listed in the table above were believed present in the previous application, dated January 31, 2001:

- i. Metals, Cyanide, and Total Phenols (except for Total Zinc which is listed in the table)
- ii. GC/MS Fraction Volatile Compounds (no data result for Bis Ether; Dichlorodifluoromethane; 1,3-Dichloropropylene; and Trichlorofluoromethane)
- iii. GC/MS Fraction Acid Compounds
- iv. GC/MS Fraction Base/Neutral Compounds
- v. GC/MS Fraction Pesticides
- b. The following is a quantitative description of the effluent quality as submitted in Section 13 of the CWB-ZOM Form, dated January 20, 2006, and additional information, dated February 21, 2006.

Parameter	CWB-ZOM Form	HAR, §11-54-6(b)(3) for Dry *		
Total Nitrogen (μg/l)	20,000	110.00 (Total Nitrogen)		
Ammonia Nitrogen (μg/l)	8,200	2.00		

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Parameter	CWB-ZOM Form	HAR, §11-54-6(b)(3) for Dry *		
Nitrate+Nitrite Nitrogen (μg/l)	2,900	3.50		
Orthophosphate Phosphorus (µg/l)	2800	{1}		
Total Phosphorus (μg/l)	2900	16.00		
Chlorophyll <u>a</u> (μg/l)	2.72	0.15		
Turbidity (NTU)	4.2	0.20		
Total Suspended Solids [aka Nonfilterable Residue] (mg/l)	18.3	{1}		
pH (standard units)	6.5	7.6 - 8.6		
Dissolved Oxygen (% saturation)	66	> 75%		
Temperature (°C)	24.7	+/- 1 °C ambient		
Salinity (µmohs/cm)	1850	+/- 10% from natural/ oceanographic factors		

# Notes:

c. The following is a quantitative description of the effluent quality as submitted in Sections 14.a. and 14.b. of the CWB-ZOM Form, dated January 20, 2006.

Parameter	CWB-ZOM Form	HAR, §11-54-4(b)(3) for Saltwater, Chronic
Arsenic (µg/l)	ND	36
Barium (µg/l)	4.0	{1}
Cadmium (µg/l)	ND	9.3
Chromium (µg/l)	ND	{1}
Chromium (VI) (μg/l)	ND	50
Copper (µg/l)	8.3	2.9
Lead (μg/l)	ND	5.6
Mercury (μg/l)	ND	0.025
Nickel (µg/l)	ND	8.3
Silver (µg/l)	ND	ns
Zinc (µg/l)	18.8	86
Cyanides (µg/l)	ND	1
Phenols (µg/l)	ND	ns
Sulfides (µg/l)	ND	{1}

<sup>\* &</sup>quot;Dry" criteria apply when the open coastal waters receive less than three million gallons per day of fresh water discharge per shoreline mile.

<sup>{1}</sup> Parameter not listed.

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#### Notes:

ns No Standard has been developed.

- {1} Parameter not listed.
- d. Some influent values from the Annual Pollution Prevention Report for Calendar Year 2005, dated February 15, 2006, are as follows: Data shown in italics are from the DMRs.

Parameter (units)	Yearly Average Value	Maximum Daily Value
Influent Flow (MGD)	1.171	4.490
Influent Biochemical Oxygen Demand 5-Day (BOD) (mg/l)	148	750.0
Influent Suspended Solids Loading (mg/l)	195	840.0

- 2. Outfall Serial No. 002 (Storm Water Associated with Industrial Activities)
  - a. The following is a description of the effluent characteristics discharging through Outfall Serial No. 002 as submitted in EPA Form 3510-2F of the application, dated January 20, 2006.
    - i. "The natural contours of the facility topography may convey storm water runoff from the facility boundaries at the southwest corner. The southwest corner has a fetch area consisting of the grassed area south of the drying bed, and from the eastern periphery which may contain runoff from the clarifiers, effluent pumps and the trickling filter. The grassed areas east of the trickling filter and the clarifiers will drain easterly but a perimeter mound will contain all runoff in this direction. Runoff from grassed areas west of the sand drying beds would drain west of the facility. Accumulated runoff from the center areas which encompass the remaining structures for the WRF would drain into one of three locations, either the headworks, the sand drying beds or the effluent polishing pond, all of which are regulated and monitored by NPDES Permit HI 0110078, Outfall 001." (Part I)
    - ii. "Due to the unique nature and topography of the WRF, normal rainfall events seldom create a runoff. Runoff generated from the impervious areas are generally absorbed into the grass/sand areas. The facility operators have indicated that they have not observed a rain event that has created a runoff situation. Based on the facility layout, which contains vast, open, grassed areas, the runoff coefficient may be less than 15%. However, it is conceivable that a rain event of a significant intensity may create runoff in a quantity that discharges south into Kaneohe Bay or easterly into the marsh/mangrove area." (Part VII.A.)

- iii. "The pollutants believed to be present in the storm water discharge are based on the priority pollutant scan conducted on the effluent and the sludge in October 2004. The priority pollutant scan indicates that Zinc was found in detectable concentrations in the effluent. Cadmium, Chromium, copper, lead, molybdenum, nickel, silver, thallium, zinc, mercury, bis(2-Ethylhexyl)phthalate, beta BHC, Dieldrin, and Heptachlor were found in detectable concentrations in the sludge. The wastewater also contains colonies of fecal coliform, various species of nitrogen, phosphorus and chlorine. Although these pollutants are present in the effluent and sludge, management practices are implemented to insure these pollutants are minimized in the storm water runoff." (Part VII.C.)
- iv. "A storm event that created a runoff in a quantity that can be sampled has not occurred. Efforts will be undertaken to collect samples during the next significant rain event that generates runoff that can be sampled." (Part VII.D.)

#### PROPOSED DETERMINATIONS

- 1. Proposed Effluent Limitations and Monitoring Requirements
  - a. The proposed effluent limitations and monitoring requirements for Outfall Serial No. 001 are described in Part A.1. of the permit.
  - b. The proposed effluent limitations for Outfall Serial No. 001 are based on the definition of the secondary treatment regulations contained in the 40 CFR Part 133; HAR, Chapter 11-54; and best professional judgement.
  - c. Biochemical Oxygen Demand (5-Day) (BOD<sub>5</sub>), Total Suspended Solids (TSS), and pH: The BOD<sub>5</sub>, TSS, and pH are the EPA limitations for secondary treatment plants (40 CFR Part 133.102). The BOD<sub>5</sub> and TSS mass limitations are derived from the EPA concentration limits and the treatment plant's design flow rate.
  - d. Oil and Grease The oil and grease limit of 10 mg/l enforces basic provisions of the State's Water Quality Standards (HAR, Chapter 11-54, Section 11-54-4), especially the prohibition against floating materials including oil and grease. This limitation was added because many industrial discharges to the sewer system are from oil/water separators and because oil discharges to the sewer have been a recurring problem for the MCBH Kaneohe Bay WRF. The basic standards are listed in Section 1 of the Standard NPDES Permit Conditions.
  - e. Settleable Solids and Total Coliform Bacteria
    - i. The settleable solids limit of one (1) ml/l continues to be removed from the current permit because it is more applicable to use the Total Suspended Solids limit.

- ii. Total Coliform Bacteria The total coliform limit, which applied only to effluent used for golf course irrigation, was removed from the permit issued on August 12, 1996.
- f. The DOH has included requirements pertaining to the adoption and subsequent implementation of the Total Maximum Daily Load Waste Load Allocations in Part E.1.d. of the permit.
- 2. Whole Effluent Toxicity Limitations and Monitoring Requirements

The whole effluent toxicity (WET) limitation is in accordance with 40 CFR 122.44(d) and is further explained in Part C of the draft permit. The purpose of the limitation and monitoring requirements is to measure effects of effluent toxicity on saltwater aquatic life.

a. Short-Term Chronic Toxicity

The draft permit requires short-term chronic toxicity testing because it measures the nonlethal effects of the effluent on test organisms. This is preferred to acute toxicity testing, which measures lethality, because the effluent may cause adverse impacts to test organisms without being lethal.

In accordance with HAR, Chapter 11-54, Section 11-54-4(b)(4)(A), which describes continuous discharges through submerged outfalls, the chronic WET limitation is based on the "no observed effect concentration" (NOEC). The chronic NOEC is the highest measured continuous concentration of an effluent or a toxicant that causes no observed effect on a test organism.

The following equation has been used to calculate the permit limitation for the chronic NOEC:

NOEC = 100/initial dilution factor\*

= 100/186= 0.54%

Chronic Toxicity = 100/NOEC

= 100/0.54% $= 186 \text{ TU}_c$ 

- \* The dilution factor of 186 is provided by the 1985 dilution study prepared by Tetra Tech, Inc. for the Kailua Regional WWTP Mokapu Outfall (NPDES Permit No. HI 0021296).
- 3. Priority Pollutant Monitoring

The Permittee is required to perform an annual EPA priority pollutant scan as a permit condition. If a pollutant is detected at a potentially toxic level, the permit will be modified to limit the discharge. Review of the Annual Priority Pollutant Scan Analysis Results for

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Outfall Serial No. 001 from 2002 to 2005 (below); the applicable saltwater acute limitations, chronic limitations, and fish consumption standards from HAR, Chapter 11-54, Section 11-54-4(b)(3); and the Mokapu Outfall dilution factor, shows that the Total Copper and Total Mercury parameters exceeded the saltwater acute limitations from HAR, Chapter 11-54, Section 11-54-4(b)(3).

Therefore, limits based on the saltwater acute limitations from HAR, Chapter 11-54, Section 11-54-4(b)(3) for Total Copper and Total Mercury have been included in Part A.1. of the permit. The DOH expects the Permittee to meet the limits for Total Copper and Total Mercury at Discharge Serial No. 001 when the Industrial Pretreatment Requirements are imposed at the industrial facilities responsible for the previous exceedances.

The DOH does not expect an exceedance of the remaining priority pollutants and therefore, there are no numerical limitations for the remaining priority pollutants. The requirement to monitor and report the remaining priority pollutants on an annual basis continues to be included in Part A.1. of the permit.

Only those parameters which were detected during this time period 2001-2005 are listed in this table. The parameters are categorized and noted in the table as follows: {1} Semivolatile Organics, {2} Organochlorine Pesticides and PCBs; {3} Volatile Organics; and {4} Metals.

Parameter (units) [Chemical Abstracts Service No.]	2002	2003	2004	2005	11-54 *
bis(2-Ethylhexyl)phthalate {1} (μg/l)	2.9	ND	ND	ND	ns
Heptachlor {2} (μg/l) [76-44-8]	<0.0047	0.011	ND	ND	0.053/*0.0036 (0.00009)
Toluene {3} (µg/l)	<1	ND	ND	25	2,100/ns (140,000)
Total Antimony {4} (μg/l)	57.7	ND	ND	ND	ns/ns (15,000)
Total Copper {4} (μg/l)	<10	ND	ND	5.9	2.9/2.9 (ns)
Total Mercury {4} (μg/l) [7439-97-6]	<0.2	3.5	ND	ND	2.1/0.025 (0.047)
Total Nickel {4} (μg/l)	<10	ND	ND	6.1	75/8.3 (33)
Total Zinc {4} (μg/l)	14.8	ND	18.8	23	95/86 (ns)

 $\mu g/l$  = microgram per liter

ND = Not Detected

\* = HAR, Section 11-54-04(b)(3), Saltwater, Acute Limit/Chronic Limit (Fish Consumption) standard

ns = no standard has been developed

#### 4. Enterococcus

- a. As with Total Nitrogen and Total Phosphorus, the effluent monitoring for enterococcus provides a record of the MCBH Kaneohe Bay WRF's contribution to the Mokapu Outfall discharge. Because the Water Quality Standard may be exceeded, monitoring of enterococcus bacteria is required at a frequency of five (5) times per month at Outfall Serial No. 001.
- b. Results from enterococcus monitoring of the receiving waters by the City's Kailua Regional WWTP Permit No. HI 0021296 may be provided to the DOH on the MCBH Kaneohe Bay WRF DMRs.

### c. Recreational Criteria

- i. The specific criteria applicable to marine recreational waters within 300 meters (1,000 feet) from the shoreline are from HAR, Chapter 11-54, Section 11-54-8(b).
- ii. The specific criteria applicable to marine recreational waters 300 meters (1,000 feet) from the shoreline until three (3) miles from the shoreline are from the "Water Quality Standards for Coastal and Great Lakes Recreation Waters; Final Rule," 69 FR 67221, dated November 16, 2004, and effective December 16, 2004. The limit for the single sample maximum allowable density uses the upper 75% confidence level (104CFU/100ml) for the coastal recreational waters because of the greater potential for more people to be exposed in the area around the Mokapu Outfall.

## 5. Zone of Mixing Requirements

- a. The MCBH Kaneohe Bay WRF contributes approximately 10% of the wastewater flow in the Mokapu Outfall. The City, which contributes the remainder of the wastewater, is required to perform receiving water monitoring to demonstrate compliance with State Water Quality Standards in the ocean. The standards for Hawaii "Open Coastal Waters" are specified in HAR, Chapter 11-54, Section 11-54-6(b)(3).
- b. The City has a "Zone of Mixing" (No. ZM-97), issued under HAR, Chapter 11-54, Section 11-54-9 of the Water Quality Standards which allows the standards to be exceeded within a defined area around the outfall. The ZOM extends 500 feet from the outfall and measures 1,000 ft. by 1,960 ft. Part B.1. of the permit prohibits the MCBH Kaneohe Bay WRF discharge from causing a water quality standards violation at the boundary of the ZOM.
- c. The effluent monitoring will provide a record of the MCBH Kaneohe Bay WRF's discharge contribution in the event of a receiving water violation.

d. Although there are no effluent limits for Total Nitrogen and Total Phosphorus, they shall continue to be monitored in Part A.1. of the permit for compliance with Part J. of the permit. See Section 11. of this Fact Sheet.

## 6. Treatment Plant Maintenance Program

The Permittee is required to continue using its computerized preventive maintenance program and to maintain its routine monitoring of the treatment plant processes. According to the Permittee by phone conversation on August 9, 2001, the computer software program currently used, AllMax OPERATOR 10, was placed into service somewhere around June to August of 1989 and has been updated. The software owner has changed from MACOLA.

## 7. Industrial Pretreatment Requirements

- a. The permit contains basic pretreatment requirements for non-domestic discharges to the MCBH Kaneohe Bay WRF sanitary system. These include prohibitions against pollutants which might interfere with the treatment plant processes or collection system, or pass through the treatment plant into the discharge, and include oil-water separators, silver recovery units, and grease traps.
- b. The permit contains specific requirements for the inspection and maintenance of the oil water. This was identified as a non-domestic waste source in the MCBH Kaneohe Bay WRF's industrial discharge survey and as a maintenance concern. The pretreatment limitation for oil water separators is 50 mg/l, which is the level achievable by basic gravity separators meeting American Petroleum Institute (API) design criteria. This limitation is applied to free oil and unemulsified oily water.
- 8. Sludge Requirements As specified in Part G of the permit.
- 9. Wastewater Pollution Prevention Program As specified in Part H of the permit.
- 10. Storm Water Monitoring and Reporting Requirements As specified in Part I of the permit. The proposed effluent limitations and monitoring requirements for Outfall Serial No. 002 are described in Part I.1. of the permit.

## 11. Specific Water Quality Parameter Effluent Requirements

- a. Performance-based threshold values for Total Nitrogen and Total Phosphorus are established to maintain plant efficiency and are specified in Part J. of the permit.
- b. The threshold value of 6.99 mg/l for Total Phosphorus was not exceeded during the term of the permit, issued on January 24, 2002, therefore it is continued to be used in this part of the permit as the threshold value.

- c. The continued threshold value of 30 mg/l for Total Nitrogen is based on the 95% of 26.2 mg/l which was calculated based on data from March 2002 to April 2006 and used along with BPJ. Total Nitrogen values of 41.70 mg/l in July 2002, and 43 mg/l in December 2004, were the only times that the test results were greater than the threshold value of 30 mg/l.
- d. Exceedances of the threshold values more than once in 12 consecutive months would result in the Permittee increasing monitoring frequencies and initiating investigations to determine the cause of the exceedances. If exceedances continue, the Permittee shall also implement a reduction evaluation plan.

### **DEFINITIONS**

- 1. The Definitions specified in Part K of the permit are different from the definitions in the 40 CFR and HAR, Chapter 11-55 and its Standard Conditions.
- 2. The definitions for "Toxic Units" are from the EPA <u>Technical Support Document For Water Quality-based Toxics Control</u> (EPA/505/2-90-001, March 1991).